MANUFACTURING FINANCE PHASE REVIEW GUIDELINES

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ABSTRACT: These guidelines list the Manufacturing Finance deliverables required of Manufacturing Finance during each phase of a product's life cycle, as defined by the *Corporate Phase Review Process Guide*.

APPLICABILITY: These guidelines are intended to be a useful reference for Manufacturing Finance personnel.

STATUS: APPROVED 15-May-1989. Type $ VTX SMC for expiration date.

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APPROVAL: These guidelines are approved for use by Manufacturing Finance personnel throughout Digital.

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Phase 0 - Strategy and Requirements

Deliverables (Expectations)	Inputs (Dependencies)	Plan	Outputs (Reports/Documents)
Manufacturing Impact Statement/ Finance	Engineering/Manufacturing to project unique material subassembly cost	Manufacturing Plan	Worldwide manufacturing investment analysis strategic plan * Assure program affordability within PBU goals
Identify Finance Reporting/ Budgeting Process	Manufacturing process, i.e. projections. * Labor * Capital * Experts from Engineering PBUM, Mfg. plants, other engineering/manufacturing organizations	Manufacturing Plan	* Sourcing alternatives – geography/presence * Capacity * Process technology requirements * Make/buy analysis
	Manufacturing investment	Manufacturing Plan	Program spending forecast/ budgeting/ reporting * Capital * E69/E97 New Plant Start–Up
	NPSU inputs worldwide * Functional Mfg. team	Manufacturing Plan	* Major Assumptions/Risks
	Volumes/First Revenue Ship (FRS)	Business Plan	Product cost projections * Major assumptions/ risks/ sensitivity analysis
			Preliminary P & L – Mfg. line items Competitive finance information * Identify competitive financial metrics * Product cost * ROI/ROA * Gross margin * Other productivity/ profitability measurements

Phase 1 - Planning and Preliminary Design

Deliverables (Expectations)	Inputs (Dependencies)	Plan	Outputs (Reports/Documents)
Manufacturing Phase 1 Plan/ Finance Plan of Record	Eng./Plant/Engineering New Products Purchasing projections for material subassembly cost * Updated BOMs.	Manufacturing Plan	Worldwide Mfg. investment analysis strategic plan * Assure program affordability within PBU goals * Sourcing alternatives – geography/ presence
Implementation of Finance Reporting/ Budget Process	Manufacturing Process i.e. projections * Labor * Capital * Experts from engineering, PBUM, Mfg. plants, other Eng./Mfg. organizations	Manufacturing Plan	* Capacity * Process technology requirements * Make/buy analysis
	Integrated Mfg.Investment inputs worldwide * Functional Mfg. Team/ Plants/ Mfg. Groups	Manufacturing Plan	Program spending forecast/ budget/ reporting * Capital plan * E69/E97 New Plant Start–Up * Major assumptions/ risks
	Volumes/ First Revenue Ship (FRS)	Manufacturing Plan	Product cost projections (plan of record) * Major Assumptions/ risks/ sensitivity analysis
	Competitive data obtained from available resources i.e. plants, Center of Excellence, public domain information, Digital in–dustry experts.	Business Plan	Ensure existence of documented proto process and cost projections Forecast/ report P & L – Manufacturing line items * Quarterly reporting Competitive finance information * Generate competitive financial metrics * Product cost * ROI/ROA * Gross margin * Other productivity/ profitability measurements * Identify cost drivers
	Source plants identified	Manufacturing Plan	

Phase 2 - Design and Implementation

Deliverables (Expectations)	Inputs (Dependencies)	Plan	Outputs (Reports/Documents)
Manufacturing Phase 2 Plan/ Finance	Plants/ENPP material subassembLy cost projection	Manufacturing Plan	Worldwide Mfg. investment analysis * Assure program affordability within PBU goals
Monitoring of Finance Reporting/ Budget Process	Mfg. process complete * Labor * Capital * Experts from Eng., PBUM, Mfg. plants, other engineering/ manufacturing organizations	Manufacturing Plan	* Sourcing alternatives – geography/ presence * Capacity * Process technology requirements * Make/buy analysis
	Integrated Mfg. investment inputs worldwide * Functional Mfg. team plants/ Mfg. groups	Manufacturing Plan	Program spending forecast/ budget/ reporting * Capital (plan vs actual) * E69/E97 New Plant Start–Up * Major assumptions/ risks
	Volumes updated/ FRS	Business Plan	Product cost projections * Major assumptions/ risks/ sensitivity analysis
	Completed BOMs		
	Competitive data updated from available resources, such as: Plant, Center of Excellence, public domain information, Digital industry experts.	Business Plan	Monitor Mfg. proto process and Mfg. cost Forecast/ report P & L – Mfg. line items * Quarterly reporting Competitive finance information * Generate competitive financial metrics * Product cost * ROI/ROA * Gross margin * Other productivity/ profitability measurements
	Source plants Mfg. plan	Manufacturing Plan	
	Final detailed design completed	Engineering Plan	

Phase 3 - Qualification

Deliverables (Expectations)	Inputs (Dependencies)	Plan	Outputs (Reports/Documents)
Manufacturing Phase 3 Plan/ Finance	Plants/ENPP material subassembly cost projection	Manufacturing Plan	Worldwide Mfg. investment analysis * Assure program affordability within PBU goals
Monitoring of Finance Reporting/ Budget Process	Integrated Mfg. investment inputs worldwide * Functional Mfg. team plants/ Mfg. groups	Manufacturing Plan	* Sourcing alternatives – geography/ presence * Capacity * Process technology requirements
	Volumes updated	Business Plan	* Make/buy analysis
	ECO process in place	Engineering Plan	Program spending forecast/ budget/ reporting
	Competitive data updated from available resources such as Plants, Center of Excellence, public domain information, Digital industry experts	Engineering Plan	* Capital (plan vs. actual) * E69/E97 New Plant Start–Up * Major assumptions/ risks
	Source plants Mfg. plan	Manufacturing Plan	Product cost projections * Work with plants to establish first–year standard costs on file. * Major assumptions/ risks sensitivity anaylsis Transition plan – PBUM Finance Monitor Mfg. proto process and Mfg. cost Forecast/ report P & L – Mfg. line items Competitive financial information * Update competitive financial metrics * Product cost * ROI/ROA * Gross margin * Other productivity/ profitability measurements

Phase 4 - Volume Production

Deliverables (Expectations)	Inputs (Dependencies)	Plan	Outputs (Reports/Documents)
Manufacturing Phase 4 Plan/ Finance	Plants material subassembly cost projection	Manufacturing Plan	Worlwide Mfg. investment analysis * Assure program affordability within PBU goals * Finance support to capacity plan
Monitoring of Finance Reporting/ Budgeting Process	Comprehensive capacity plan	Manufacturing Plan	
	Value Engineering product changes	Engineering Plan	Program spending forecast/ budget/ reporting * Capital (plan vs. actual)
	Integrated Mfg. investment worldwide * Functional Mfg. team plants and Mfg. groups	Manufacturing Plan	* E69/E97 New Plant Start–Up * Major assumptions/ risks
	Volumes/ FRS updated	Business Plan	Product cost status * Value engineering financial analysis
	ECO process working	Engineering Plan	* Major assumptions/risks/ sensitivity analysis
	Competitive data updated from available resources such as Plants, Center of Excellence, public domain information, Digital in–dustry experts.	Engineering Plan	Plant financial analysis and reporting of product actual results Forecast/ analyze/ report P & L Mfg. line items.
	Source plants Mfg. plan	Manufacturing Plan	Document final proto costs Transition plan implemented Competitive financial update * Update competitive financial metrics * Product cost * ROI/ROA * Gross margin * Other productivity/ profitability measurements.

Phase 5 - Product Retirement

Deliverables (Expectations)	Inputs (Dependencies)	Plan	Outputs (Reports/Documents)
Manufacturing Phase 5 Plan/ Finance	Plants material subassembly cost projection	Manufacturing Plan	Worldwide Mfg. investment analysis * Assure program affordability within PBU goals * Finance support to capacity plan
Monitoring of Finance Reporting/ Budget Process	Product Phase Down Plan	Manufacturing Plan	
	Inventory pipeline plan	Manufacturing Plan	Program spending forecast/ budget/ reporting * Capital plan vs. actual disposition * Inventory provisions
	Comprehensive capacity plan	Manufacturing Plan	
	Integrated Mfg. investment inputs worldwide * Functional Mfg. team plants/ Mfg. groups	Manufacturing Plan	Plant production financial reports * Product cost * Plan vs. actual * Major assumptions/ risks/ sensitivity analysis
	Volumes updated		
	ECO process working	Engineering Plan	
	Source plants Mfg. plan	Manufacturing Plan	End of Life (EOL) transition plan implemented * EOL Mfg. investment srategy
			Forecast/analyze/report P & L Mfg. line items. * Gross margin * Other productivity/ profitability measurements
			Competitive financial information update * Update competitive financial metrics * Product cost * ROI/ROA

APPENDIX A

RELATED DOCUMENTS

A.1 EL-Class Digital Documents

EL-Class Number	Document Title
EL-CP356-00	*Corporate Phase Review Process Guide*

Copies of Digital EL-Class documents may be obtained from Standards and Methods Control, NRO4/D4, DTN: 287-3724, JOKUR::SMC, or via VTX SMC.

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